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(54) METHODS AND APPARATUS FOR SCOUT-BASED CARDIAC CALCIFICATION SCORING

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## (57)

## **ABSTRACT**

In one aspect, the present invention is a method for producing CT images of a patient's heart suitable for calcification scoring, in which the heart has a cardiac cycle. The method includes steps of acquiring data representative of a first scout-scanned CT image of physical locations of the patient's body including at least a portion of the patient's heart at phases  $\phi_1(L)$  of the cardiac cycle, acquiring data representative of a second scout-scanned CT image of the physical locations of the patient's body including at least a portion of the patient's heart at phases  $\phi_2(L)$  of the cardiac cycle different from  $\phi_1(L)$  at physical positions L of interest, and determining a difference image from the acquired data representative of the first scout-scanned CT image and the acquired data representative of the second scout-scanned CT image data. It is not necessary that  $\phi_1(L)$  and  $\phi_2(L)$  be constant as a function of position L.

## 21 Claims, 5 Drawing Sheets



